THE ECONOMIC SITUATION

Bruce Yandle

Dean Emeritus,

College of Business & Behavioral Science, Clemson University Director, Strom Thurmond Institute Economic Outlook Project vandle@clemson.edu

December 2006

- Soft landing, hard landing, or no landing?
- Money supply growth is still predicting a slow economy.
- Taking a look at South Carolina.
- Petroleum eases, just as promised!
- Consider the Great American Bread Machine.
- Books and heroes.

THE NATIONAL ECONOMY

Soft landing, hard landing or what?

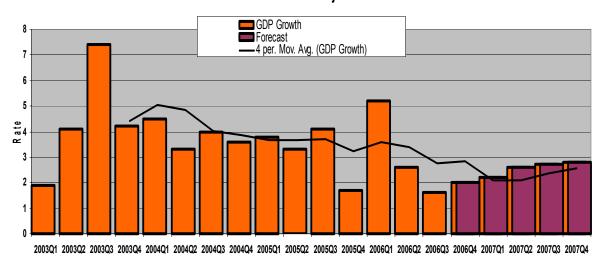
With \$3.00 gasoline, a popped housing bubble, growing deficits and a double handful of interest rate increases, prognosticators are still asking how this sailing ship will land. Hard? Soft? Or not at all.

The signs right now are signaling a landing . . ., a soft one.

Apparently driven by inflation concerns, the Fed has squeezed the economy, doing so with a new recognition that things happen with a lag. But with some 14 earlier increases working their way through the economy, the Fed has held steady for two meetings. No increase. No decrease. Add on nine months, and we get to June 2007, the time when the economy should begin to accelerate again. That's right. The lag is pretty well established in economic analysis.

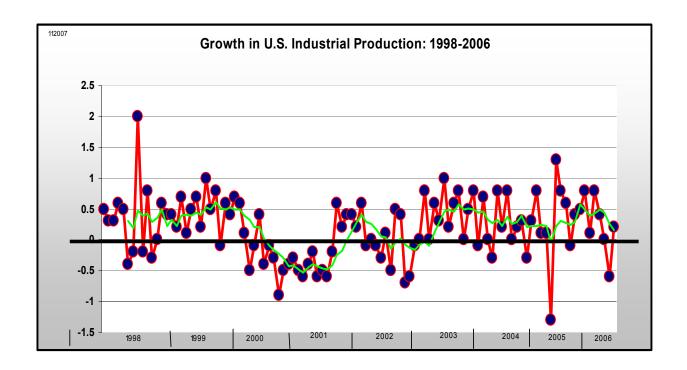
The expected trajectory for GDP growth is shown in the accompanying chart, which includes a four-quarter running average. As indicated, the next two quarters are expected to register growth at about 2.0%. Then, when June rolls around, things will pick up. By the time the year ends, real GDP growth should have averaged about 2.7%.

GDP Growth and Projections



But industrial production is still lagging.

The monthly data seen in the next chart give a better definition of the effects of the Fed's efforts to slow the economy. The last button in the chart is for October 2006. Notice that industrial production growth in June through August was heading south, and September was under water. These data suggest that 3Q2006 and 4Q2006 GDP growth will be rather weak, but that 2007 should come in with a bit more umph.

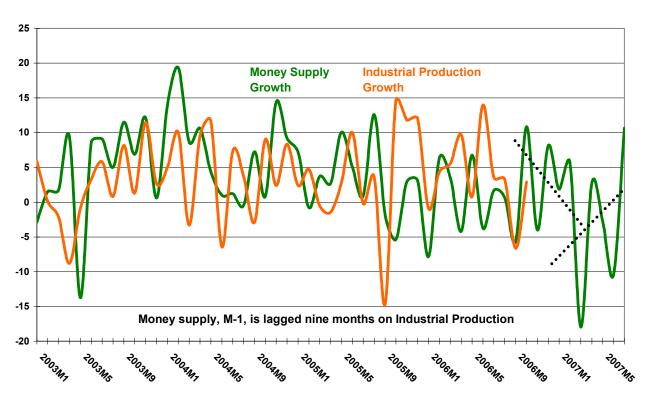


Money supply growth, another check on the outlook.

To get a forecast on the next nine months, consider the mapping of lagged money supply growth on industrial production growth. The next chart shows how industrial production has followed money growth over the last three years. The current fit is a fairly good one. The Fed's effort to reduce the supply of credit has delivered slower growth, just as they wanted. Now take a closer look at the array of money supply points that predict production for the next nine months. Notice that I have inserted trend lines. One points south through June 2007. After that the trend point north.

Once again, the data call for a slow economy in the first half of 2007 with recovery to a more normal pace after that.





Report Card time . . . , almost.

At year end, I screw up my courage again and offer a forecast for key economic indicators 12 months out. Yes, it is a one-shot opportunity to hit (or miss!) a target twelve months later. When I offer closing values for the Prime or Dow-Jones Industrial Average, I know I am moving onto troubled waters. The exercise does help keep one humble, and it also enables some interesting thoughts about what went wrong.

Since I write the December Situation Report in late November, I really don't have the closing year-end values. Never to be deterred by a lack of perfect information, I forecast anyway. (I will use the March Report to give the final December 2006 values.)

In the table below, the left-most column contains the forecast I made for December 2006 at the end of 2005. The middle column provides values for the last week in November 2006, when this piece was written. The last column gives the forecast for 2007's year-end values.

	Forecast DEC. 2006	Actual NOV. 2006*	Forecast DEC. 2007
GDP Growth	3.8%	3.1%	2.7%
Inflation	2.7%	2.7%	2.5%
Unemployment	4.4%	4.4%	4.0%
Employment monthly growth	200M	180M	190M
Prime , , , , , , , , , , , , , , , , , , ,	7.70%	8.25%	7.75%
30-year Fixed Mortgage	6.80%	5.76%	6.00%
Dow-Jones	11,500	12,150	13,200
Oil	\$ 6 7.00	\$ 58.00	\$ 4 5 .00
Gold	\$ 510.00	\$ 625.00	\$ 600.00

• Values on November 28, 2006.

The top-most item, GDP growth, shows how in a fit of optimism, I over-estimated 2006 GDP growth. As will be revealed later, I also under-estimated the tough stance taken by Fed in raising interest rates. Indeed, therein lies the heart of the story. Fourteen Prime rate increases later, the economy began to tank. With a little help from the Fed, I hit core inflation on the nose. I had the same good luck for the unemployment rate. But then things went down hill. The Prime was two Fed increases higher than I thought it would be, but the Dow did a lot better than I expected..., finally. I missed the price of oil somewhat and also the price of gold.

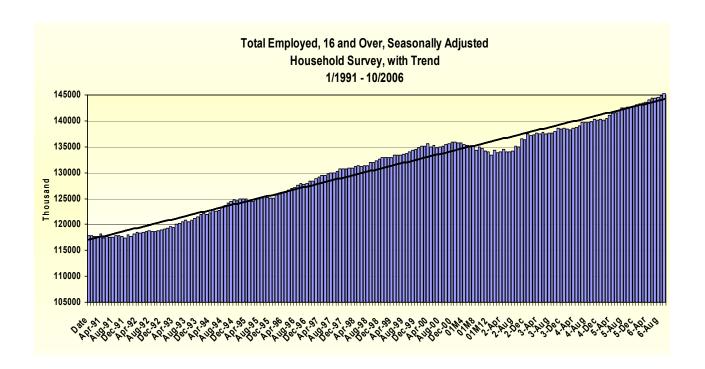
An examination of the right-most column shows that I expect the record for 2007 to show a slower economy, with the slower part occurring in the first half of the year. I expect inflation to moderate a bit, and unemployment to decline somewhat. As seen by the forecast value for the Prime, I expect the Fed to open up a bit this year. I am also optimistic about the Dow and the price of oil.

How it looks on the employment front.

It takes just a quick glance to see that total U.S. employment is again above trend. Indeed, this has been the case for six months. But it takes a longer look to find the origins of national employment growth.

Since 2001, the health care economy, which includes pharmaceuticals, and health insurance, has added more than 1.7 million new jobs. Employment growth for the rest of the economy taken together is dead in the water. No, this doesn't mean that no other sectors are growing. But it does mean that when employment in one sector, Manufacturing was zagging down,

another—Professional Business Services—was zigging up. There were other strong sectors as well. For example, Housing and related activities added 900,000 jobs in the last five years. Still, the booming health care sector is truly impressive, and with rising life expectancies and higher incomes, the boom promises to continue.

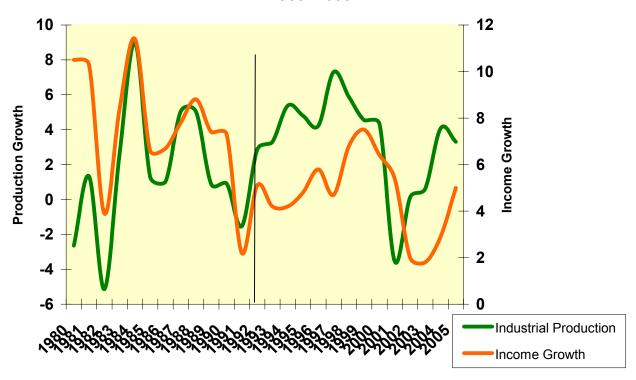


SOUTH CAROLINA DIGEST

Translating to South Carolina

Industrial production for the nation still maps fairly well to growth in S.C. Total Personal Income..., but not quite as good as it once did. Consider the next chart, which I have divided into two periods, one where the mapping is tight and the other, the more recent period, where the mapping doesn't work quite so well. It is obvious that the structure of the S.C. economy changed around 1993, which was about the time that NAFTA became operational.

S.C. Income Growth vs. Industrial Production Growth 1980--2005



But while the fit between the series is not quite as tight, the positive/negative relationship still helps to give a forecast.

Recall the forecast for national Industrial Production developed in the last section. Production will be weak until June 2007 and then accelerate. This suggests that S.C. Total Personal Income growth will also weaken, perhaps to around to 4.0%, and then recover in the last six months to around 5.75%. The income recovery should be associated with declining unemployment. This should end the difficult transformation the S.C. economy has been experiencing for almost 10 years..., at least as registered in the unemployment rate. We will be at a point where employment growth will more than offset employment losses.

South Carolina, the nation and the regional picture.

As shown in the next chart, South Carolina's 3Q2006 employment growth outperformed the nation and neighboring states. This catching up should continue in 2007. But the outline map that follows illustrates clearly what happens when a major employer closes. Consider Spartanburg's loss of 1,300 jobs and Anderson's loss of 1,200 jobs. These job losses reflect the transformation that is still working through the S.C. economy. On the other hand, Columbia's gain of more than 10,000 jobs reflects the new economy's growth in a location that did not have the large plant closings that continue in the Upstate.

Nonfarm Employment Growth 3rd Quarter 2005 – 3rd Quarter 2006 For US, SC and Selected SE States

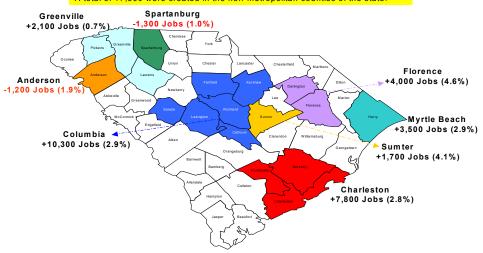
Nonfarm employment in SC surged 2.9% in the 3^{rd} quarter of 2006, compared to a 1.4% job growth in the U.S.

State	Percent change 3 rd Quarter 2005 – 3 rd Quarter 2006	Rank
United States	1.4%	
South Carolina	2.9%	11
Georgia	1.9%	18
North Carolina	1.9%	18
Alabama	1.6%	23
Tennessee	1.2%	31

Sources: Bureau of Labor Statistics; SC Dept. of Education

Employment Change by Metropolitan Areas October 2005 – October 2006

Over the year, 29,400 jobs were created in six of the eight metropolitan areas. A total of 17,500 were created in the non-metropolitan counties of the state.



Source: SCESC/LMI

SPECIAL TOPICS

A year-end report on the Great American Bread Machine

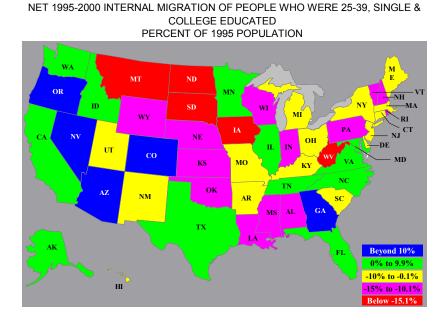
Occasionally, just occasionally mind you, I encounter dedicated pessimists who want to talk hard times. They read headlines about plant closings, how Detroit is suffering, and how America's auto industry is just disappearing. On hearing this, I ask what part of the auto industry are you talking about? I drive a Nissan made in Tennessee. We have a Chrysler made in Mexico. An American branded truck made in Canada. Go figure. Confusing, isn't it.

But what we know is that the U.S. auto and parts industry taken together has been booming. We also expect that things will not be so bright for the next six months or so. We also know that the incredible Great American Bread Machine has generated economic growth in just the last three years that is equal to the entire China economy.

Let me repeat that. Since June 2003, the U.S. economy has added \$2.2 trillion in growth, an amount equal to the entire China economy.

This fascinating tidbit and a few more came to me from Gary Tompkins of the Kidder Group. No doubt about it, China, with last year's growth equal to 9.3%, is hot. But so is Arizona with 8.7%, Nevada with 8.2% and Florida with 7.8%. By the way, Florida's economy is twice that of Sweden's. Continuing the count of hot "countries," we must include Idaho with a 2005 income growth of 7.5% and Oregon with 6.7%.

The next map shows how these high growth states relate to internal migration patterns of the single, college educated young people, those I call the "go-getters." Turns out that these go-getters are attracted to high growth states, and that they contribute to those high growth rates.



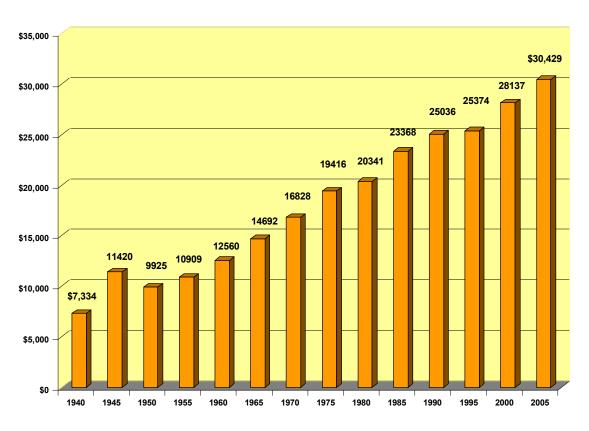
8

It is simply amazing.

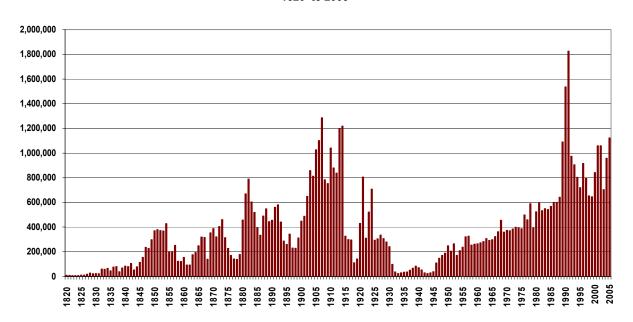
Our growing economy is lifting average income, but obviously not every body's income. It is raising life expectancies, and doing this while taking in a huge number of immigrants.

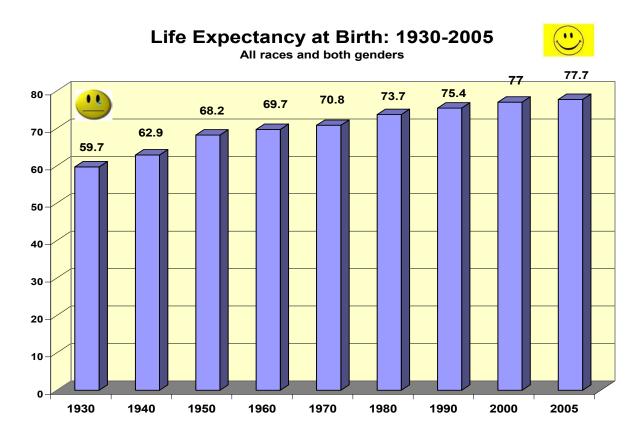
The next few charts give the picture.

Real Per Capita Disposable Personal Income 2005 dollars



U.S. Immigration to Naturalization 1820 to 2005





But not everyone is enjoying the benefits.

We all know that we can drown in a river with an average depth of three feet. Average income is rising as are life expectancies, but the distribution of benefits in recent years has become more skewed toward the high end. A complex result of a transforming economy that is absorbing a huge number of immigrants, just why the distance between rich and poor has widened defies a simply explanation. Saying this also suggests that trying to alter the result is not simple either.

The U.S. is the only industrialized country that is growing younger. The others are graying rapidly. Workers with less experience generally earn less than more experienced workers. Then, the booming construction sector has absorbed large numbers of Hispanics, generally at the lower end of the wage schedule. At the same time, falling manufacturing employment has displaced workers to the services, trade, and health care sectors. The income outcome is not clear.

The growing number of higher income people is something we should celebrate, of course. And part of that growth relates to the higher premium earned with higher educational attainment, a premium which has increased in recent years. Another part of the growth is driven by the premium earned by the growing creative class, those entrepreneurs who are able to navigate successfully in a more complex global economy.

The fact that the Great American Bread Machine creates new wealth while pulling in millions of new residents is itself remarkable. Placing limits on the salaries of entrepreneurs and mandating higher wages for lower-wage workers might seem like an easy Robin Hood approach for redistributing the economy's proceeds. But the game just doesn't work that way.

Handicapping the creative will lead to less creativity. Mandating higher wages at the lower end will reduce the use of lower skilled workers. Neither outcome seems desirable.

Legos and the supply chain.

Legos, those wonderful colored blocks that have inspired many a would-be architect and engineer, are produced by Lego Group, a Danish firm that was founded in 1932. The name was formed by combining two letters of the Danish words "Leg godt," which mean "Play well." It turns out that the new word was not new at all. In Latin, appropriately enough, lego means "I assemble."

But Lego Group is really disassembling. Or what I usually term "disintegrating." In June, the firm announced a transformation of its supply chain. Lego is pairing up with the Singapore firm Flextronics, which will take over and expand manufacturing at Lego's Czech Republic plant. Another part of the firm's production has been moved to China. Its distribution functions have also been transformed. The firm is literally breaking itself into smaller pieces.

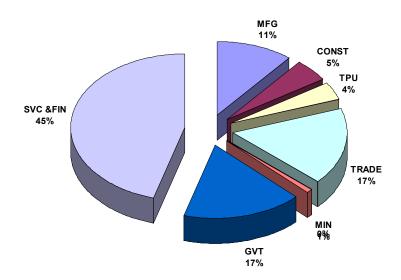
Lego's challenge has to do with competition, but not head-on competition of the sort many manufacturers encounter. But the effect is the same. The competition is coming from electronic

toys. To hold on, Lego has to get its price down and its distribution more efficient while focusing is creative juices on marketing.

Manufacturing firms across the U.S. have been doing the Lego thing for years. The result of all this is seen in the pie slices that describe where people work. I show here two pies, one for 1940, the other for 2005.

U.S. EMPLOYMENT: 1940 Non-Agricultural **GVT** 13% MIN 3% MFG 34% FIN & SVC 14% CONST 5% **TRADE TPU** 22% 9%

U.S. EMPLOYMENT: 2005



Compare the 1940 manufacturing employment slice with its 2005 counterpart. Truly a disappearing sector. And notice the large services and finance sector where growth has occurred. Part of the pie shuffle is causes by disintegration, where functions once inside

manufacturing firms are now free standing. Another part of services growth relates to the rising knowledge economy.

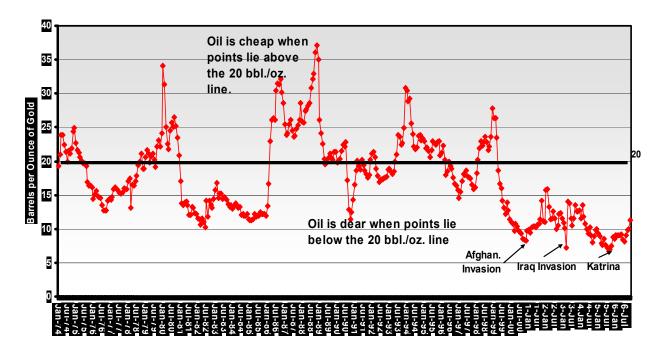
Of course, knowledge workers make it possible for firms like Lego to know about others like Flextronics.

The knowledge challenge is not so much about removing ignorance in the old sense of the work but about connecting brains around the world so that what others know can supplement what we know.

"But we might see \$60."

In the September Situation Report, I closed the discussion of energy prices with these words. At the time, a barrel of crude was fetching \$73.00 and seemed to be heading higher, at least in the opinion of commentators on the evening news. Part of my good forecast was based on luck, which I welcome any time. The other was based on the updated chart below. Regular readers will recall that the chart is based on a historic relationship between gold and oil. The rule of thumb says an ounce of gold buys 20 barrels of crude oil. The chart here shows the dark 20 barrel line and an array of points that cycle around the line. The most recent observation seen on the right-most border is headed in the right direction, at least for consumers.

072106



December 2006

One regular reader who saw my September forecast sent a story, "Really, Really Cheap Oil", from the October 2 **Forbes** magazine. Braver than I, the author predicts oil will be selling for \$45 a barrel by second quarter 2007. But this really accords with my chart, which calls for \$32. Of course, this would require an end to Middle East hostilities, happier times in South America,

and a friendly government in Nigeria. We might also include a return of the Tooth Fairy and Santa Claus!

On second thought, we know that Santa Claus is coming to town! Pass the word.

A Hero passes.

Milton Friedman, one of my heroes and certainly an American icon, died in November. At the ripe old age of 94, Professor Friedman was still deeply engaged with life and work. Indeed, his work was his life. It is hard to imagine anyone with a greater passion for freedom joined by extraordinary intelligence, wit and old-fashioned good manners. Friedman was first and foremost a scholar, one who assigned incredible importance to looking at data. He earned a high station as an economist for path-breaking work in monetary economics. But his paperback **Capitalism and Freedom** made his name a household word.

Smitten early on by Friedman's wonderful little paperback, I required it as parallel reading in most of my courses. But I did so with a money back guarantee. I promised to buy back the book from any student who felt it was not a good investment, and to do so after final grades were posted. Over the years, I may have purchased just 10 books, which I quickly passed on to other students.

Just two years ago, when I was program chairman for the Association of Private Enterprise Education, we were able to have Professor Friedman on our Orlando program by interactive video-conferencing technology. He was in Palo Alto. Friedman started the session by offering some comments. He then entertained questions from the attendees. His careful responses drew on his 70 years of research and thought. It was truly amazing to see him engaged in the discussion.

The last question posed to him asked which among his many policy struggles he considered to be the most important.. As I pondered the question, I wondered what he would say. Would it be his pioneering effort to prove that money matters, that monetary policy was the critical engine for affecting economic activity? Would it be his efforts in behalf of free trade? Flexible exchange rates? Educational vouchers?

It was none of these.

After a short pause, Friedman answered: My most important effort, the thing I am most proud of, he said, is elimination of the draft. The rise of the all-volunteer army. As he put it, there is no place for involuntary servitude in a country that prizes freedom above all else. Freedom is precious, he argued. We should be willing to pay market-clearing wages to all who are willing to serve.

A book you may want to read

Jim Megginson, a remarkable historian who has spent a career studying African American Life in South Carolina's Upstate, recently completed his magnum opus. **African American Life in South Carolina's Upper Piedmont, 1780-1900**, published by University of South Carolina, is at once one of the most readable books you may pick up over Christmas and also one of the more fascinating. The book reflects painstaking research of courthouse records, archives, correspondence, and general store ledgers. From it, one gets a better understanding of the social and religious life of the slave community and economy. Megginson's interest in the

subject no doubt goes back to his childhood when his grandparents operated the Smith Hotel in Calhoun, South Carolina, what is now renamed Clemson. Today, a sparkling white fraternity house, the Smith Hotel then faced a now lost magnolia shaded street that connected hotel and train station. Jim Megginson spent a lot of time in Calhoun as a youngster.

Megginson's account of African American life extends past slavery to freedom. He tells how life eventually changed, in some cases providing a lower standard of living but something more precious that money cannot buy—Freedom.

"The Lord helps those who help themselves."

In 1949 I was a sophomore at Lanier High School for Boys in Macon, Georgia. Those were the days when high schools were often separated by gender, and when the boys' school was operated as a military unit. Such was Lanier High School for Boys, named for that great Georgia poet, Sidney Lanier.

Fittingly enough, our athletic teams were called the Lanier Poets. And what poets we were.

At the time, most of Lanier's professors were men who had returned from World War II with a desire to teach, coach and impose a bit of military discipline. Professor B.C. Adams was one of those wonderful men. B.C. drove a faded blue 1942 DeSoto automobile, with the driver's window fully open, no matter the temperature. He was a constant cigar smoker.

We boys rode the city buses to school, or as close as we could get. In my case, close was about a half-mile walk from campus. As time for school approached, a gang of boys would be disgorged at the bus stop. Most of the boys would stand on the corner to the last minute trying to thumb a ride.

For some reason, a friend and I, would often take off walking to campus. Perhaps we were more anxious than the rest about getting to school on time and avoiding the sting of the professor's paddle.

As we walked the half mile to campus, along would come the faded blue Desoto. B.C. would slow down, stop, and give us a ride. When we hopped in the back seat of the DeSoto, B.C. would always tell us that he did not pick up riders at the corner. He only gave rides to those who were hiking to campus.

"The Lord helps those who help themselves," he would say. And that was the end of the conversation. Sometimes, we thought B.C. *was* the Lord.

Maybe there is a lesson here.

A note on the Clemson Renaissance project.

I close this Report by thanking all who have supported the effort of the College of Business & Behavioral Science to open the Clemson Renaissance Center on Greenville's Main Street. With the generous support of Greenville's Hayne Hipp and Mark Kent, we will soon be opening offices on the 6th floor of the Liberty Building, just across from the Poinsett-Westin on Main. With an unrelenting focus on entrepreneurship and expanding wealth creating enterprises in the region, the Center will be the location of team members of the Spiro Institute for Entrepreneurial Leadership, the home of the Southern Entrepreneurs Project, the Small

Business Development Center, and Entrepreneurs Forum and a coordinating point for teams of Clemson graduate students who engage in faculty directed consulting activities with Upstate firms and organizations. In the midst of all this, the Center will guide the final preparation of a small number of entrepreneurs who prepare to launch high impact enterprises in the region. The Center will also be the focal point of a lecture series and other events that will add to the intellectual life of the Upstate.

Many of the readers of this Report have helped in spreading the word. Others are leading small teams of contributors who will help fund the student teams. Still others are considering making longer-term pledges of support.

We are engaged in a long-run effort to build one of the world's leading communities of entrepreneurs and innovators.

If more information is needed, please contact me at yandle@clemson.edu.

My thanks for the support that we are receiving as we build this enterprise.